

SUMMER VACATION
HOME WORK
CLASS - X

## Read the following passage carefully and answer the questions that follow:

1. As the family finally sets off from home after many arguments, there is a moment of lull as the car takes off. "Alright, so where are we going for dinner now?" asks the one at the driving wheel. What follows is a chaos, as multiple voices make as many suggestions.
2. By the time, order is restored and a decision is arrived at, tempers have risen, feelings injured and there is at least one person grumbling.
3. Twenty years ago, you would step out of home, decision of meal and venue already made with no arguments or opposition and everybody looked forward to the meal with equal enthusiasm. The decision was made by the head of the family and the others fell in line. Today every member of the family has a say in every decision which also promotes a sense of togetherness and bonding.
4. We empower our kids to take their own decisions from a very early age. We ask them the cuisine they prefer, the movie they want to see, the holiday they wish to go on and the subjects they wish to study.
5. It's a closely connected world out there, where children consult and guide each other. A parent's well meaning advice can sound like nothing more than unnecessary preaching, how then do we reach our children through all the conflicting views and make the voice of reason be heard? Children today question choices and prefer to go with the flow.
6. What then is the best path to take? I would say the most important thing one can do is to listen. Listen to your children and their silences. Ensure that you keep some time aside for them, insist that they share their stories with you. Step into their world. It is not as complicated as it sounds; just a daily half an hour of the quality time would do the trick.

On the basis of your understanding of the above passage, answer the questions that follow:
(i) According to the passage, who said, "so, where are we going for dinner now?"
(A) narrator
(B) one at the steering
(C) one of the passengers
(D) one of the guests
(ii) Twenty years ago, according to the passage, decisions were....
(A) unanimous, with no argument
(B) made by the children
(C) taken by the head of the family
(D) not taken by elders
(iii) In modern times, children are to take their own decision from a very early age.
(A) forbidden
(B) trained
(C) not given permission
(D) allowed
(iv) How are the kids empowered from a very early age?
(v) What is the message conveyed by the passage? Give your response in about 40 words.
(vi) Complete the given statement:

The synonym of 'hurt' given in para 2 is $\qquad$ .
(vii) What does the word "cuisine" mean in para 4?

## Read the extract given below:

1. Necessity is indeed the mother of invention. When areas in and around Leh began to experience water shortages, life didn't grind to a halt. Why? Because a retired civil engineer in the Jammu and Kashmir Government came up with the idea of artificial glaciers.
2. Ladakh, a cold desert at an altitude of 3,000-3,500 meters above sea level, has a low average annual rainfall rate of 50 mm . Glaciers have always been the only source of water. Agriculture is completely dependent on glacier melt, unlike the rest of river/monsoon-fed India. But over the years, with increasing effects of climate changing, rainfall and snowfall patterns have been changing, resulting in severe shortage and drought like situations. Given the extreme winter conditions, the window for farming is usually limited to one harvest season.
3. It is located between the natural glacier above and the village below. The one closer to the village and lowest in altitude melts first, providing water during April-May, the crucial sowing season. Further, layers of ice above melt with the increasing temperature, thus ensuring continuous supply to the fields. Therefore, farmers have been able to manage two crops instead of one. It costs about 1,15,000 and above to create a glacier.
4. Fondly called the glacier man, he has designed over 15 artificial glaciers in and around Leh since 1987. In recognition of his pioneering effort, he was conferred the Padma Shri by the President of India.
5. There are a few basic steps followed while creating an artificial glacier. River or stream water at high altitude is diverted to a shaded area of the hill facing north, where the winter sun is blocked by a ridge or a mountain range. At the start of winter i.e., in November, the diverted water is made to flow on sloping hills facing distribution channels. Stone embankments are built at regular intervals which impede the flow of water, making shallow pools which freeze, forming a cascade of ice along the slope. Ice formation continues for 34 months resulting in a large accumulation of ice which is referred to as an 'artificial glacier'.


## Based on your understanding of the extract, answer the following:

1. Infer one reason for the following, based on information in paragraphs 1.

Areas in and around Leh began to experience water shortage but life didn't grind to a halt.
2. Select from the passage the appropriate phrase to fill in the blanks:

Agriculture is completely dependent on $\qquad$ unlike the rest of river/monsoon-fed India.
3. Complete the following analogy correctly with a word/phrase from paragraph 3 Icing : cake :: layers: $\qquad$
4. Select the correct option to complete the following sentence:

At the start of winter the diverted water is made to flow
(A) on sloping hills facing distribution channels.
(B) on high altitude
(C) one ice-cold water level.
(D) on mountain range.
5. From the given chart, select the months of water surplus
(A) January, February
(B) November, December
(C) July, August, September
(D) March, April
6. Examine the reason for the change in rainfall and snowfall pattern in about 40 words.
7. Write any two steps followed while creating an artificial glacier.
8. Fill in the blank by selecting the correct option from the passage:

The $\qquad$ have been the only source of water in areas in and around Ladakh.
(A) Glaciers
(B) Rivers
(C) Streams
(D) Water springs

## GRAMMAR

## Complete ANY TEN of twelve of the following tasks as directed.

(i) Fill in the blank by using the correct form of the word in the bracket:

The teacher $\qquad$ (complete) the preparations for the function before the term ended.
(ii) Identify the error in the given sentence, about the importance of physical exercise and supply the correction.
The modern student understands the importance of physical exercise. He spend one or two hours daily in the open air where he takes part in exercises which work wonders for his health.

Use the given format for your response.

| Error | Correction |
| :---: | :---: |
|  |  |

(iii) Shubham shared some information, with Leela, about his homework. Report Leela's question.

Have you completed your homework?
(iv) Select the correct option to complete the narration of the dialogue between Latha and her father.

Father: Why ask so many questions, Latha?
Latha: I believe that if you don't know the answer, keep asking till you do!
Father asked Latha the reason for the many questions she was asking. Latha exclaimed good-humouredly that in event of not knowing the answer one should
(A) keep asking till one does.
(B) kept asking till one don't
(C) keep asking till one do
(D) kept on to ask till one do
(v) Complete the narrative by following in the blank with the correct option. Last year I visited the same spot $\qquad$ I was not riding a cycle. (even/if/as/but)
(vi) Identify the error in the given sentence from a school magazine report and supply the correction:

Our school organised a week-long Dance and Music festival, which commenced on the 18th of August and ended on the 26th of August, in which 15 schools from our town had participated.

| Error | Correction |
| :---: | :---: |
|  |  |

(vii) Fill in the blank by using the correct form of the word in the bracket:

When a satellite $\qquad$ (launch) the rocket begins by going slowly upwards.
$(A)$ is launched
(B) are launched
(C) have been launched
(D) were launched
(viii) Report the dialogue between two friends Seema and Anu by completing the sentence:

Seema: What brings you here?
Anu: I am going to Dr. Sen's house.
In response to the question about what brought Anu there Anu said
$\qquad$ .

## SUBJECT- HINDI

प्रश्न 1. वाक्य का परिचय देते हुए रचना के आधार पर उसके भेदों के नाम बताइए।
प्रश्न 2. संयुक्त वाक्य से आप क्या समझते हैं?
प्रश्न 3. रचना के आधार पर किस प्रकार के वाक्य में आश्रित उपवाक्य प्रयुक्त होते हैं?
प्रश्न 4. *निम्नलिखित वाक्यों में मुख्य उपवाक्य तथा गौण या आश्रित उपवाक्य छांटिए:*
(i) उसने कहा कि मैं शिक्षक हूं।
(ii) उसने उस घर को खरीदा, जो उसके मित्र का था।
(iii) जो अच्छे खिलाड़ी होते हैं, उन्हें सब चाहते हैं।
(iv) मैंने कहा था कि तुम कल आ जाना।
(v) जो विद्वान् होते हैं, वे विनयी होते हैं।

प्रश्न 5. *निम्नलिखित वाक्यों को सरल/साधारण वाक्यों में बदलिए*:
(i) मुझे बताओ कि तुम्हारा जन्म कहाँ हुआ था।
(ii) उसने मुझसे कहा कि मां को बुलाओ।
(iii) जब तक मेरा मित्र नहीं आएगा, मैं कहीं नहीं जाऊँगा।
(iv) मुसीबत आ जाए, तो घबराना नहीं चाहिए।
(v) अध्यापक चाहता है कि उसके शिष्य अच्छे बनें।
(vi) मेरा विचार है कि आज कहीं घूमने चलें।
(vii) वह बेईमान है, अतः शीघ्र पकड़ा जाएगा।
(viii) ज्यों ही वह घर पहुंचा, उस पर उसके पिता बरस पड़े।
(ix) श्याम परोपकारी आदमी है, इसलिए उसे सभी पूछते हैं।
(x) चुनाव परिणाम निकल आए हैं, इसलिए कल नई सरकार बनेगी।

प्रश्न 6. *निम्नलिखित वाक्यों को संयुक्त वाक्यों में बदलिए:*
(i) मैंने उसे पढ़ाकर नौकरी दिलवाई।
(ii) वह खाना खाते ही खेलने चला गया।
(iii) कम रोशनी में पढ़ने के कारण विद्यार्थी अपनी आँखें खो बैठा।
(iv) आप वहीं बैठकर प्रतीक्षा करें।
(v) मेरी जो गाय काली है, वह खेत में चर रही है।
(vi) यदि वह तेज दौड़ता, तो जीत जाता।
(vii) वह बाहर निकला ही था कि वर्षा होने लगी।
(viii) शहर में भूकंप आने पर तबाही मच गई।
(ix) राहुल कल यहाँ आया, उसने निखिल से बात की, वह चला गया।
$(x)$ कल शादी के कार्यक्रम में होने वाले शोर के कारण हम पढ़ नहीं सकेंगे।
प्रश्न 7.*निम्नलिखित वाक्यों को मिश्र वाक्यों में बदलिए*:
(i) तुम बस रुकने के स्थान पर चले जाओ।
(ii) शीला ने एक पुस्तक मांगी और वह उसे मिल गई।
(iii) मोहन शास्त्री जी के घर हिंदी पढ़ने गया है।
(iv) मेहनत करने पर भी गरीबों को रोटी नहीं मिलती।
(v) नीरजा ने कहानी सुनाई और नमिता रो पड़ी।
(vi) कम आय होने पर कम खर्च करना चाहिए।
(vii) उसने मुझसे मामा जी के घर चलने के लिए कहा।
(viii) सच्चे आदमी को कभी कोई कमी नहीं रहती।
(ix) उस गाँव के चारों ओर जंगल था और वह डाकुओं का गढ़ था।
( x ) ऊँचा पद पाकर वह और भी विनम्र हो गया।
प्रश्न 8. *रचना के आधार पर वाक्य भेद बताइए:*
(i) पिताजी की इच्छा थी, इसलिए मैं आपसे मिलने चला आया।
(ii) वह ज्वर से पीड़ित होने के कारण स्कूल नहीं आया।
(iii) राजू मेरे घर आया था, क्योंकि उसे संस्कृत पढ़नी थी।
(iv) जिन बच्चों ने शोर मचाया था, उन्हें पकड़ लिया गया है।
(v) यद्यपि वह मंत्री बन गया है, फिर भी उसका व्यवहार पूर्ववत् है।
(vi) इतना दहेज दिया कि देखने वालों ने दाँतों तले अंगुली दबा ली।
(vi) रमेश के हाथ में चोट लग गई है, इसलिए वह स्कूल नहीं जा सकेगा।
(viii) पिताजी के जीवन का यह सिद्ध्धांत था कि व्यक्ति को समाज में विशिष्ट बनकर रहना चाहिए।
(ix) मुझे खेलना अच्छा लगता है और तुम्हें गाना अच्छा लगता है।

## SUBJECT- SANSKRIT

1. प्रथमः पाठः - शुचिपर्यावरणम्

द्वितीयः पाठः - बुद्धिर्बलवतीसदा
*पाठ 1,2, से व्याकरणिक शब्दों का अभ्यास करते हुए पाठों का अर्थ लिखें।*
*2. श्रीमद्भगवद्गीता अथवा पंचतंत्र के कोई पांच श्लोक / सुभाषितानि हिंदी अर्थ सहित लिखो एवं याद करो । (परियोजना कार्य)*

## SUBJECT- MATHS

Q.1. Write the H.C.F. of two consecutive even numbers.
Q.2. Write the H.C.F. and L. C. M. of $2^{3} \times 3^{2}$ and $2^{2} \times 3^{3}$.
Q.3. The LCM of two numbers is 14 times their HCF. The sum of LCM and HCF is 600 . If one number is 280 , then find the other number.
Q.4. Determine the values of $p$ and $q$ so that the prime factorisation of 2520 is expressible as $2^{3} \times 3^{q} \times p \times 7$.
Q.5. Show that reciprocal of $3+2 \sqrt{2}$ is an irrational number.
Q.6. Check whether $6^{n}$ can end with the digit 0 for any natural number $n$ ?
Q.7. Prove that $5-2 \sqrt{3}$ is not a rational number.
Q.8. Write the prime factorisation of 5510 .
Q.9. What is the HCF and LCM of the smallest prime number and the smallest composite number?
Q.10. Two tankers contain 850 litres and 680 litres of petrol respectively. Find the maximum capacity of a container which can measure the petrol of either tanker in exact number of times.

## Chapter 2 Polynomials

Q.1. Find the values of k so that $(x-1)$ is a factor of $k^{2} x^{2}-2 k x-3$.
Q.2. If $(x+a)$ is a factor of $2 x^{2}+2 a x+5 x+10$, find $a$.
Q.3. If $\alpha$ and $\beta$ are zeroes of the quadratic polynomial $x^{2}-6 x+a$; find the value of ' $a$ ' if $3 \alpha+2 \beta=20$.
Q.4. If $\alpha$ and $\beta$ are the zeroes of a polynomial, such that $\alpha+\beta=6$ and $\alpha \beta=4$, then write the polynomial.
Q.5. For what value of $k$, is 3 a zero of the polynomial $2 x^{2}+x+k$ ?
Q.6. Form the polynomial whose zeroes are -5 and 4.
Q.7. If $\alpha$ and $\beta$ are the zeroes of the quadratic polynomial $p(x)=x^{2}+2 x-35$, then find the value of $\alpha^{2}+\beta^{2}$.
Q.8. If $\alpha$ and $\beta$ are the zeroes of the quadratic polynomial such that $\alpha+\beta=24$ and $\alpha-\beta=8$, find a quadratic polynomial having $\alpha$ and $\beta$ as its zeroes.
Q.9. Write the degree of the polynomial $(x-7)(x+7)+(8-x)(8+x)$.
Q.10. Find a quadratic polynomial, the sum and product of whose zeroes are 0 and $2 \sqrt{2}$ respectively.

## PROJECT (MA 1)

Project on BMI (Body Mass Index).

## BODY MASS INDEX BMI

Objective: Body mass index (BMI) is a measure of body fat based on height and weight that applies to the person.
BMI Formula $=($ weight in kg$) /\left[\right.$ height $\left.(\mathrm{m})^{2}\right]$
Data table for the persons. (This is an example. Don't copy it.)

| S.n | Name of the person | Relation | Weight in kg | Height in cm | Height in m | BMI |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Ajay Kumar | Grandfather | 65 | 157 | 1.57 | 26.37 |
| 2 | Bhanumati | Grandmother | 54 | 151 | 1.51 | 23.68 |
| 3 | Chahal | Father | 77 | 172 | 1.72 | 26.03 |
| 4 | Devika | Mother | 72 | 160 | 1.60 | 28.12 |
| 5 | Ehsan Ali | Uncle | 68 | 164 | 1.64 | 25.28 |
| 6 | Fatima | Aunty | 57 | 152 | 1.52 | 24.67 |
| 7 | Ganesh | Brother | 70 | 150 | 1.50 | 31.11 |
| 8 | Haritika | Sister | 55 | 148 | 1.48 | 25.11 |
| 9 | Ishan | Friend | 78 | 158 | 1.58 | 31.24 |
| 10 | Jayant | Friend | 58 | 180 | 1.8 | 17.90 |

Note: Minimum 10 persons required for the BMI data table.

## BMI table to estimate your body fat.

| Condition | BMI |
| :--- | :--- |
| Underweight | Below 18.5 |
| Normal | $18.5-24.9$ |
| Overweight | $25.0-29.9$ |
| Obesity | $30.0-$ and above |

Conclusion: If the person is underweight then possibly malnourished. Needs good nutrition/balanced diet.
Normal means good health.
Obesity means too much intake but less workout. It is dangerous for health.
Consequences of Obesity.
High BP, High LDL CHOLESTEROL, Low HDL CHOLESTEROL, Type 2 diabetes, Coronary heart disease, Stroke, Gallbladder disease, Osteoarthritis.
One should take care if BMI is 25 and above.
Result: From the BMI data table

1 person is Underweight.
5 persons are normal.
2 persons are overweight.
2 persons are Obeys.
Answer the following questions.
Q1. What is the normal range of BMI?
Q2. Why obesity is dangerous for human being?
Q3. Write any 5 diseases if MBI is more than 30.
Q4. If a person is underweight, how he/she can cure it?
Q5. What is balanced diet?

## SUBJECT- SCIENCE

## Instructions for students:-

This is compiled diagram-based activity of Science which is an MA activity.
The diagrams are to be drawn in A4 size paper, stapled all together and are to be submitted to in charge Science teacher.

## PHYSICS

Q.1.Draw ray diagrams showing the image formation by a concave mirror when an object is placed
(a) between pole and focus of the mirror
(b) at focus
(c) between focus and centre of curvature of the mirror
(d) at centre of curvature of the mirror
(e) beyond centre of curvature of the mirror
(f) at infinity
Q.2. Draw ray diagrams showing the image formation by a convex mirror when an object is placed
(a) between the pole and infinity
(b) at infinity

## CHEMISTRY

Q.1.Draw a neat well labelled diagram of electrolysis of water .
Q.2.Draw an experimental set up to show-
A) Burning of Magnesium ribbon
B) Reaction of Zn granules with dil $\mathrm{H}_{2} \mathrm{SO}_{4}$ acid.

## BIOLOGY

Q. 1 Explain the Holozoic nutrition with the help of a suitable diagram.
Q. 2 Draw and label the following -
a) Human Digestive System.
b) Human Respiratory System.

## SUBJECT- SOCIAL SCIENCE

Dear Students,
As per the CBSE guidelines, it is mandatory for all the students of class $X$ to complete a researchbased project in Economics. In this project, you will have the opportunity to explore a topic of your choice within the field of economics. Your project will be due on 25.06.2024, and it will be evaluated on several parameters. Here are the instructions for completing your project:

Topic Selection: You can choose any One topic from the following:
i) Consumer Awareness/Consumer Rights
ii) Any One Social Issue. (Corruption/ Unemployment/ Poverty/ Income inequality)
iii) Sustainable Development.

## Additional Tips:

Use A-4 size file paper for your project.

- The project must be Handwritten. (Use Blue/Black ink)
- The project must not exceed 15 pages \& should not be of less than10 pages.
- Follow any specific instructions or requirements provided by your teacher regarding project format, length, or content.
- Avoid using plastic covers.
- When submitting an economics project on any topic, it's important to follow certain guidelines to ensure clarity, organization, and completeness. Here are the guidelines you should consider:

1) Cover Page: Create/Design a cover page with the title of the project, your name, class/section, date of submission, and any other relevant information such as the name of your school or institution.
2) Index: Include an index or table of contents listing all the sections and subsections of your project along with their respective page numbers.
3) Introduction: Begin with an introduction that provides an overview of the topic you are addressing. Clearly state the objectives and scope of your project in this section.
4) Detailed Description of the Topic: Provide a comprehensive explanation of the chosen topic. Use subsections to organize your content logically. (5-7 pages)
5) Conclusion: Summarize the key findings and conclusions drawn from your research or analysis. (1-2 pages)
6) Bibliography: Include a bibliography or list of references citing all the sources you used in your project.
7) Remark by the Teacher: Leave space for your teacher to provide feedback or remarks on your project.
8) Insert Relevant Pictures: Incorporate relevant pictures, graphs, charts, tables, or diagrams throughout your project to enhance understanding and visual appeal.
9) Evaluation Parameters: Your project will be evaluated on several parameters, including the Cover page, quality of your research, the clarity of your writing, content (the depth of your analysis), and the overall coherence of your report.
10)Submission: Your project should be submitted to your subject teacher latest by 25.06.2024. Please mention your Name, Class \& section, and the title of your project on the Cover page.

We hope that you will find this project both challenging and rewarding. If you have any questions or concerns, please do not hesitate to contact your teacher. Good luck and happy researching!

Sincerely,
OPJS

